

# **U-Turns: State Laws and Practices**

Prepared for

Bureau of Highway Operations
Office of General Counsel

Prepared by
CTC & Associates LLC
WisDOT Research & Library Unit
January 30, 2008

Transportation Synthesis Reports are brief summaries of currently available information on topics of interest to WisDOT staff throughout the department. Online and print sources for TSRs include NCHRP and other TRB programs, AASHTO, the research and practices of other transportation agencies, and related academic and industry research. Internet hyperlinks in TSRs are active at the time of publication, but changes on the host server can make them obsolete. To request a TSR, e-mail research@dot.state.wi.us or call (608) 261-8198.

# **Request for Report**

Laws in the United States vary considerably with respect to U-turns. In some areas, state governments issue the statutes that permit or prohibit U-turns, whereas elsewhere practices are directed by municipalities and local governments. WisDOT's Bureau of Highway Operations asked us to investigate laws and practices nationwide related to U-turns. We included in our research additional considerations related to the use of U-turns as a traffic control technique, including operational and safety factors.

# **Summary**

In our **Overview of State and Municipal Codes**, we found that in many states, it is municipal rather than state law that effectively prohibits U-turns. We highlighted **States with Notable Practices** related to U-turns, including the "Michigan Left" in several states, turnarounds in Texas, and U-turns at controlled intersections in California. We completed our survey of state U-turn laws for Wisconsin's **Neighboring States**. Finally, an excellent starting point for the discussion of U-turns used for traffic control is **National Research** conducted by NCHRP that describes in detail current practices and safety and operational considerations.

# **Overview of State and Municipal Codes**

Links to each of the 50 state government Web sites with the relevant codes on U-turns are available at <a href="http://public.findlaw.com/traffic-ticket-violation-law/traffic-ticket-a-z/illegal-u-turn-laws.html">http://public.findlaw.com/traffic-ticket-violation-law/traffic-ticket-a-z/illegal-u-turn-laws.html</a>. Our survey of state codes confirms a statement in the book *Beat Your Ticket* from Nolo Press (limited preview available at <a href="http://books.google.com/books?id=U-HHw7sn1n0C&printsec=frontcover">http://books.google.com/books?id=U-HHw7sn1n0C&printsec=frontcover</a>): "In most states it is usually legal to make a U-turn unless you are in a business or residential district" (page 7/10).

Illinois statutes illustrate this point. According to Illinois code, which uses language similar to other states, U-turns are permitted when they can be done safely, without interfering with other traffic, and with driver visibility of 500 feet when performed near a curve or hill:

#### Illinois

http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=062500050HCh%2E+11+Art%2E+VIII&ActID=1815&ChapAct=625%26nbsp%3BILCS%26nbsp%3B5%2F&ChapterID=49&ChapterName=VEHICLES&SectionID=59664&SeqStart=108100000&SeqEnd=108800000&ActName=Illinois+Vehicle+Code%2E(625 ILCS 5/11-802) (from Ch. 95 1/2, par. 11-802)

Sec. 11-802. Limitations on U turns. (a) The driver of any vehicle shall not turn such vehicle so as to proceed in the opposite direction unless such movement can be made in safety and without interfering with other traffic.

(b) No vehicle shall be turned so as to proceed in the opposite direction upon any curve, or upon the approach to or near the crest of a grade, where such vehicle cannot be seen by the driver of any other vehicle approaching from either direction within 500 feet.

(Source: P.A. 82-783.)

However, Illinois municipalities typically place further restrictions on U-turns, making them unlawful in many locations throughout the state. For example, according to Chicago code, vehicles are restricted from making U-turns within 100 feet of intersections throughout the city and anywhere in the downtown area:

#### City of Chicago

http://www.amlegal.com/nxt/gateway.dll/Illinois/chicago\_il/title9vehiclestrafficandrailtransportati/chapter9 -16turningmovements?f=templates\$fn=altmain-nf.htm\$3.0#JD\_ch09\_016.x1-9-16-040

9-16-040 Limitations on turning.

- (a) The driver of any vehicle shall not turn such vehicle so as to proceed in the opposite direction at any point closer than 100 feet to any intersection unless official signs are erected to permit such turns.
- (b) It shall be unlawful for the operator of any vehicle to turn such vehicle in any street so as to proceed in the opposite direction in the territory bounded by and including Wacker Drive on the west and the north, Michigan Avenue on the east, and Congress Parkway on the south, unless official signs are erected to permit such turns.
- (c) The commissioner of transportation, subject to the review and approval of the executive director of emergency management and communications where appropriate, is authorized to determine those places within 100 feet of an intersection or within the area described in subsection (b) where turns in the opposite direction shall be permitted and to erect appropriate signs giving notice thereof.

(Added Coun. J. 7-12-90, p. 18634; Amend Coun. J. 12-11-91, p. 10832; Amend Coun. J. 12-7-05, p. 64870, § 1.9)

Our survey of state U-turn laws showed that many states have laws nearly identical to Illinois, including Kansas, Connecticut and Washington, where U-turns are permitted where safe, except as otherwise stated by a local authority. This is in contrast to Wisconsin, which provides state code that prohibits U-turns:

#### Wisconsin

http://www.legis.state.wi.us/statutes/Stat0346.pdf (page 10 of the PDF)

- 346.33 Where turns prohibited, exception. (1) The operator of a vehicle shall not turn the vehicle so as to proceed in the opposite direction upon a highway at any of the following places:
- (a) At any intersection at which traffic is being controlled by traffic control signals or by a traffic officer;
- (b) In mid-block on any street in a business district, except where the highway is a divided highway and where the turn is made at an opening or crossover established by the authority in charge of the maintenance of the highway.
- (c) In mid-block on any through highway in a residence district, except where the highway is a divided highway and where the turn is made at an opening or crossover established by the authority in charge of the maintenance of the highway.
- (d) At any place where signs prohibiting such turn have been erected by the authority in charge of the maintenance of the highway.

In our scan, we found that Oregon, like Wisconsin, provides for sweeping prohibitions to U-turns at a statewide level:

### Oregon

http://www.oregon.gov/ODOT/DMV/docs/vcb/VCB811.pdf (page 25 of the PDF)

- 811.365 Illegal U-turn; penalty. (1) A person commits the offense of making an illegal U-turn if the person is operating a vehicle and the person turns the vehicle so as to proceed in the opposite direction in any of the following places:
- (a) Within an intersection where traffic is controlled by an electrical signal. This paragraph does not apply where posted otherwise.
- (b) Upon a highway within the limits of an incorporated city between intersections.
- (c) At any place upon a highway where the vehicle cannot be seen by another driver approaching from either direction within a distance of:
- (A) 500 feet within the incorporated limits of a city; or
- (B) 1,000 feet outside a city.

# **States with Notable Practices**

We found several states that have implemented notable U-turn practices. In each case, we have included the state code that references U-turns.

# **California: U-Turns at Intersections**

Throughout California, U-turns are used at intersections as an alternative to immediate left turns against traffic between intersections. California code provides the following language:

#### California

http://www.dmv.ca.gov/pubs/vctop/d11/vc22102.htm

U-Turn in Business District

22102. No person in a business district shall make a U-turn, except at an intersection, or on a divided highway where an opening has been provided in accordance with Section 21651. This turning movement shall be made as close as practicable to the extreme left-hand edge of the lanes moving in the driver's direction of travel immediately prior to the initiation of the turning movement, when more than one lane in the direction of travel is present.

Amended Ch. 47, Stats. 1985. Effective January 1, 1986.

Where such U-turns are used, left turns are physically prevented between intersections through the use of raised medians. At the intersection, signs and traffic lights control where and when vehicles may turn. The image below shows a traffic control sign for the left two lanes of an urban street.

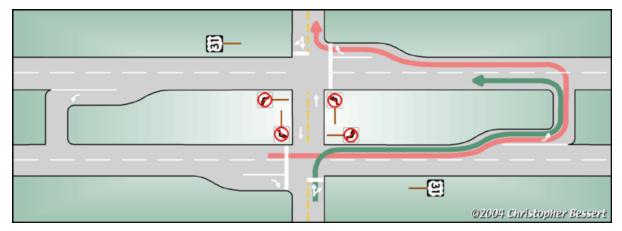


Traffic sign for a double-left turn lane in California. (Image courtesy of about.com.)

# Michigan, Florida, Maryland, New Jersey and Louisiana: the "Michigan Left"

http://www.michiganhighways.org/indepth/michigan left.html

The "median U-turn intersection treatment," more commonly known as the "Michigan Left," involves a U-turn located at a median crossover at a distance beyond an intersection. As detailed in the image and description below provided by <u>michiganhighways.org</u>, the Michigan Left is used as an alternative to turning left both off a divided highway (traffic following the red line) as well an onto the highway (green line).



Traffic flow for the Michigan Left. (Image courtesy of michiganhighways.org.)

Red Line traffic on the divided highway cannot turn left directly at the crossroad intersection. To accomplish the left turn, the divided highway traffic moved to the left lane, continues past the crossroad, and turns left into a "median crossover," usually placed about 660 feet beyond the intersection. When traffic clears sufficiently, the left turn onto the opposite direction of the divided highway is completed. The driver then moves to the right lane and turns right onto the crossroad, thus completing the traffic movement.

Green Line traffic on the crossroad wishing to turn left onto the divided highway first turns right onto that highway, moves to the left lane and turns left into the "median crossover" approximately 660 feet from the intersection. When traffic clears sufficiently, the left turn onto the opposite direction of the divided highway is completed.



Michigan Left traffic information road sign. (Image courtesy of Michigan DOT.)

Michigan has used this traffic control feature extensively for many years, and as described in the FHWA technical brief *Synthesis of the Median U-Turn Intersection Treatment, Safety, and Operational Benefits* (<a href="http://www.tfhrc.gov/safety/pubs/07033/07033.pdf">http://www.tfhrc.gov/safety/pubs/07033/07033.pdf</a>), the Michigan Left has "been implemented successfully in Florida, Maryland, New Jersey, and Louisiana in recent years." The technical brief provides further details on the Michigan Left, including its advantages and disadvantages, as well as design and location guidelines.

The 2007 article "Operational effects of right turns followed by U-turns at signalized intersections as alternatives to direct left-turns from driveways" in the journal *Advances in Transportation Studies* also investigates the Michigan Left as used in Florida. (See the abstract at <a href="http://host.uniroma3.it/riviste/ats/eleventh%20issue/B2">http://host.uniroma3.it/riviste/ats/eleventh%20issue/B2</a> 1p.pdf.)

U-turn codes for states using the Michigan Left are shown below:

### Michigan

We did not find relevant code related to U-turns. The Michigan vehicle code is available at <a href="http://www.legislature.mi.gov/(S(wbm40n2bukj5jm45ymz4en55))/mileg.aspx?page=getObject&objectName=mcl-chap257">http://www.legislature.mi.gov/(S(wbm40n2bukj5jm45ymz4en55))/mileg.aspx?page=getObject&objectName=mcl-chap257</a>

#### Florida

http://www.flsenate.gov/Statutes/index.cfm?App\_mode=Display\_Statute&Search\_String=&URL=Ch0316/SEC1515.HTM&Title=-%3E2005-%3ECh0316-%3ESection%201515#0316.1515

316.1515 Limitations on turning around.—The driver of any vehicle shall not turn the vehicle so as to proceed in the opposite direction upon any street unless such movement can be made in safety and without interfering with other traffic and unless such movement is not prohibited by posted traffic control signs.

#### Maryland

 $\underline{http://michie.lexisnexis.com/maryland/lpext.dll/mdcode/2185a/23078/2311b/23126?fn=document-frame.htm\&f=templates\&2.0\#$ 

§ 21-402. Vehicle turning left or making U-turn.

(b) U-turn.—If the driver of a vehicle intends to turn to go in the opposite direction, the driver shall yield the right-of-way to any approaching vehicle that is so near as to be an immediate danger.

### New Jersey

http://lis.njleg.state.nj.us/cgi-

<u>bin/om\_isapi.dll?clientID=153790&Depth=2&depth=2&expandheadings=on&hitsperheading=on&infobasestatutes.nfo&record={E508}&softpage=Doc\_Frame\_PG42</u>

39:4-125. Turning on curve, grade or place where view obstructed or State highway marked with "no U turn" sign

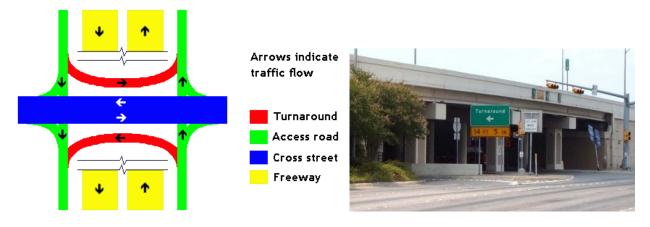
Turning on curve, grade or place where view obstructed or State highway marked with "no U turn" sign. The driver of a vehicle shall not turn such vehicle around so as to proceed in the opposite direction upon any curve or upon the approach to or near the crest of a grade or at any place upon a highway as defined in R.S. 39:1-1 where the view of such vehicle is obstructed within a distance of five hundred feet along the highway in either direction; and no such vehicle shall be turned around so as to proceed in the opposite direction on a highway which shall be conspicuously marked with signs stating "no U turn."

# Louisiana

We did not find relevant code related to U-turns. The Louisiana vehicle code is available at <a href="http://www.legis.state.la.us/lss/lss.asp?folder=106">http://www.legis.state.la.us/lss/lss.asp?folder=106</a>.

# **Texas: Turnarounds**

In Texas, "turnarounds" (or "U-turn only lanes") are used as a traffic control technique. Whereas a Michigan Left follows an intersection (for vehicles following the path of the red line shown in the traffic flow image above), a turnaround precedes an intersection and allows a driver to reverse direction without being subject to traffic signals at the intersection. The illustration on the next page, from <a href="http://www.texhwyman.com/tex.htm">http://www.texhwyman.com/tex.htm</a>, shows illustrated traffic patterns and a photograph of a turnaround in San Antonio, Texas.



Traffic flow for a turnaround in Texas. (Images courtesy of <u>texhwyman.com</u>.)

The state code governing U-turns in Texas is as follows:

# http://tlo2.tlc.state.tx.us/statutes/docs/TN/content/htm/tn.007.00.000545.00.htm#545.102.00

§ 545.102. TURNING ON CURVE OR CREST OF GRADE. An operator may not turn the vehicle to move in the opposite direction when approaching a curve or the crest of a grade if the vehicle is not visible to the operator of another vehicle approaching from either direction within 500 feet.

<u>Neighboring States</u>
Wisconsin's neighboring states of Illinois and Michigan are discussed earlier in this synthesis report. Relevant state laws for Indiana, Iowa and Minnesota are similar to the Illinois law:

#### Indiana

http://www.in.gov/legislative/ic/code/title9/ar21/ch8.html

IC 9-21-8-22

Grades; proceeding in opposite direction on approach to crest

Sec. 22. A vehicle may not be turned so as to proceed in the opposite direction upon any curve, or upon the approach to, or near the crest of a grade, where the vehicle cannot be seen by the person who drives any other vehicle approaching from either direction within seven hundred fifty (750) feet. As added by P.L.2-1991, SEC.9.

#### Iowa

http://nxtsearch.legis.state.ia.us/NXT/gateway.dll?f=templates&fn=default.htm (search for code 321.312) 321.312 Turning on curve or crest of grade.

No vehicle shall be turned so as to proceed in the opposite direction upon any curve, or upon the approach to, or near the crest of a grade or hill, where such vehicle cannot be seen by the driver of any other vehicle approaching from either direction within five hundred feet.

[C39, § 5025.02; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §321.312] For applicable scheduled fine, see § 805.8A, subsection 6, paragraph c

#### Minnesota

http://www.revisor.leg.state.mn.us/bin/getpub.php?type=s&year=current&num=169.19 169.19 TURNING, STARTING, AND SIGNALING.

Subd. 2. U-turn. No vehicle shall be turned so as to proceed in the opposite direction upon any curve, or upon the approach to or near the crest of a grade, where such vehicle cannot be seen by the driver of any other vehicle approaching from either direction within 1,000 feet, nor shall the driver of a vehicle turn the vehicle so as to proceed in the opposite direction unless the movement can be made safely and without interfering with other traffic.

# **National Research**

This NCHRP report provides additional information about current U-turn practices across the country, including safety and operational considerations.

# NCHRP Report 420: *Impacts of Access Management Techniques*, 1999 http://www.accessmanagement.info/pdf/420NCHRP.pdf

This study "classifies traffic access management techniques and presents methods for predicting the safety and operational effects of the different techniques." The use of U-turns as an alternative to direct left turns is one of eight techniques assessed for potential use and benefit. The other seven techniques are traffic signal spacing, unsignalized access spacing, corner clearance criteria, median alternatives, left-turn lanes, access separation at interchanges and frontage roads.

Chapter 8 of the report (pages 97-114 of the PDF) discusses several aspects of technique of U-turns as an alternative to direct left turns. (In this document, the abbreviation "TWLTL" refers to a two-way left-turn lane, a median lane that allows left turns for traffic in both directions.) Chapter highlights include:

- A section on **current practices**, including approaches used in California, Florida, New Jersey and Michigan (discussed earlier in this synthesis report). This section also includes descriptions and drawings of different U-turn configurations—preceding, following or at an intersection (pages 97-100).
- A section on safety effects that reports a decrease in accident rates for U-turns as an alternative to direct left turns. Table 81 shows a decrease of 22 percent in Florida and decreases of up to 50 percent in Michigan (page 107).
- Operations experience and analysis, an assessment of capacity gains and delay reductions associated with providing U-turns as an alternative to direct left turns (pages 102-105).
- A list of practical application guidelines (pages 105-107).